

Objectives

- Why program established- goals, evolution
- Today's toxics monitoring
- How data are used
- What can we learn about monitoring from inter-site variation and trends



• Lessons/Issues

Lessons/Issues





? Regional monitoring can be a reasonable and cost effective means of assessing exposure of motor vehicle and similarly prevalent pollutants



? Regional monitoring has supported identification and adoption of control measures of motor vehicles, fuels, point, and area sources (e.g. CBG, perchloroethylene and hexavalent chromium)

Lessons/Issues

-  **? Regional monitoring adequately addressed changes in air quality levels due to fuel switching and other motor vehicle controls**
-  **? Regional monitoring can also detect well-mixed cumulative emissions of many small sources.**

Lessons/Issues



? Regional monitors capture one aspect of point source monitoring, yet may overlook sub-regional populations exposed to high risk pollutants, and overlook the need for additional source controls.

Lessons/Issues



? A dense air monitoring network in a region can provide useful information on exposure due to neighborhood point sources.



? There will be trade offs between regional and neighborhood monitoring resources. Sampling frequency, number of sites, and duration need to be carefully balanced to achieve objectives of both.

Lessons/Issues





? **Neighborhood monitoring provides a distinct view of disproportionate risk that often exceeds that expressed by regional monitors.**



? **Neighborhood monitoring is particularly effective when sources are clustered and pollutants are high risk compounds.**

Lessons/Issues

- ? **Neighborhood monitoring is dynamic. Interest is often greater, objectives likely to evolve.**
- ? **Point source monitoring will be comprehensive and time consuming, e.g. number of sites and number of samplers, changing objectives, dealing with community, etc.**

Lessons/Issues



? Near source modeling has a role in assisting neighborhood monitoring design.



? Neighborhood modeling places greater demand on need for local facility-by-facility emissions information.

Lessons/Issues



Neighborhood monitoring should have a point of instigation, i.e. a community concern. A source category or cumulative impact of sources in neighborhood must be identified.

Lessons/Issues



? Local findings from neighborhood monitoring projects need to be leveraged to a larger result to help justify cost incumbent in this type of effort.



? Findings from neighborhood monitoring are transferable and can benefit other communities with similar problems.

Lessons/Issues



? Neighborhood monitoring will be the basis for strengthening emissions controls from point sources.